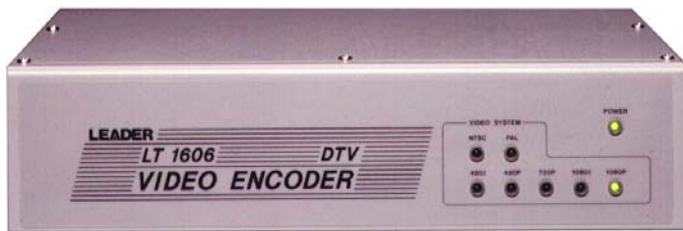


Video Encoder



- Generates NTSC, PAL and HDTV Analog Components
- Operates from R, G, B, CS and Clock from RGB Generators LT1610A, LT1611, LT1613, LT1615
- NTSC, PAL or HDTV Set Up Automatically from Input Clock
- NTSC and PAL Outputs in Full Composite, Separate Y and C and Analog Components YPbPr
- HDTV Includes 1080i, 1080p, 720p, 480i, 480p, and Others
- HDTV Analog are 3-Wire YPbPr with Tri-Level Sync
- Simultaneous Active RGB Outputs to Drive RGB Monitors

LT1606

The LT 1606 extends the flexibility of programmable RGB generators, in terms of stock and custom patterns and raster parameters (within limits), into the testing of monitors and systems that operate in fully encoded NTSC, PAL and the new HDTV analog-component systems. NTSC and PAL outputs contain fully encoded subcarrier and

burst and are available in full composite and separate Y/C using the standard 4-pin SVHS connector. Analog component feeds YPbPr, as well as actively buffered RGB, are available at the same time, making the encoder an extremely useful tool for engineering, setup of HDTV projectors, service and QC applications.

key specifications

INPUT SIGNAL REQUIREMENTS

Analog GBR
Polarity
Positive
Level
714 mV for NTSC output
700 mV for PAL, HDTV outputs
Maximum Input Level
1.5 V p-p
Input Coupling
DC
Input Impedance
75 Ω
Input Terminals / Type
3 / BNC

COMPOSITE SYNC SIGNAL INPUT

Polarity
Negative
Amplitude
C-MOS / TTL Level (H=4 V or more, L=1 V or less)
H Sync Width
NTSC: 2.79 μ s - 5.3 μ s
PAL: 3.2 μ s - 5.46 μ s
HDTV: 0.30 μ s - 1.20 μ s
Terminal / Type
1 / BNC

CLOCK INPUT

Frequency
NTSC: 14.318 MHz
PAL: 17.734 MHz
480i: 13.5 MHz
480p: 27 MHz
720p: 74.25 MHz
1080i: 74.25 MHz
1080p: 148.5 MHz

Input coupling

AC
Impedance
75 Ω
Terminal / Type
1 / BNC

OUTPUT SIGNALS

Signal Form
Composite, Y/C, Analog YPbPr
Encoded Systems
NTSC/PAL Automatically selected
Note: PAL signal does not have 25 Hz offset
Level

1 V p-p \pm 50 mV
Sync Level

NTSC: 286 mV
PAL: 300 mV

Phase Error
 \pm 3 $^\circ$

Connectors
2 BNC

1 Y/C (4-pin)

ANALOG GBR ACTIVE OUTPUTS

Level
Follow input level \pm 5%

Frequency Response
30 MHz approx.

Impedance
75 Ω

Terminals
3 BNC

YpbPr OUTPUTS

(NTSC, PAL, 480i, 480p)

Sync Level
NTSC: 286 mV \pm 15 mV
PAL, OTHERS: 300 mV \pm 15 mV

Video Levels

Y NTSC: 714 mV p-p \pm 36 mV
Y PAL: 700 mV p-p \pm 35 mV
PbPr NTSC: 714 mV p-p \pm 36 mV
PbPr PAL: 700 mV p-p \pm 35 mV

Impedance
75 Ω

Terminals
1 each (3)

BNC (YPbPr) OUTPUTS (720p, 1080i, 1080p)

Sync Level
Tri-Level \pm 300 mV

Video Level

Y: 700 mV

PbPr: 700 mV p-p

Impedance
75 Ω

Terminals
1 each (3)

ENVIRONMENTAL

Operating Temperature
0 to 40 $^\circ$ C, 5 to 85% RH

POWER REQUIREMENTS

100/115/230 V ac \pm 10%
50/60 Hz

PHYSICAL

Size (W x H x D)

11 $\frac{3}{8}$ x 2 $\frac{3}{4}$ x 8 $\frac{1}{4}$ in.

259 x 52 x 189 mm

Weight
4.4 lbs., 2 kg